

REMARKS

Claims 1-16 were pending. Claims 6 and 9-16 have been cancelled, leaving claims 1-5 and 7-8 in the application.

The Official Action objects to the drawings for not showing the masks. Figures 2-6 show top plan views of various steps in the manufacture of the device that, when considered in light of the corresponding description in the specification, are sufficient for one of skill in this art to make suitable masks. Indeed, these drawings depict where material is deposited and where material is not deposited and, to this extent, may be considered as showing the claimed masks (masks merely delineate where material is deposited from where material is not deposited). Further, the claims have been amended to more clearly define the use of the masks. The original claims may have suffered from a lack of clarity and this may have been the reason for the request for drawings of the masks as it may have been unclear how the masks were to be used. Since the drawings are sufficient for one of skill in the art to prepare suitable masks for the invention claimed in the amended claims, reconsideration and withdrawal of the requirement for additional drawings is respectfully requested.

The title and specification have been amended to make editorial changes therein, bearing in mind the criticisms in the Official Action, to place the application in condition for

allowance at the time of the next Official Action. The paragraph numbers in the Official Action do not correspond to those in the application and the corrections refer to the actual paragraph number in the application as filed.

Claims 1-5 and 7-8 were rejected under §112, second paragraph, and have been amended as to form. The steps in which the masks are used have been revised in the interest of clarity. The amendments clarifying the use of the masks are believed to be responsive to the requests in the Official Action for a description of the third mask and an explanation how to use the interlayer insulating film as a mask (further, the use of one layer as a mask for making a hole in another layer is within the skill of the artisan). Applicant confirms that PH_3 is phosphine. Reconsideration and withdrawal of the rejection are respectfully requested.

The indication that claim 5 includes patentable subject matter is acknowledged with thanks. In reliance thereon, claim 5 has been amended into independent form by adding the subject matter of amended claim 1. Consideration and allowance of amended claim 5 are respectfully requested. Note that claim 5 has also been amended as to form to improve its clarity and to delete portions not seen to be relevant to patentability of claim 5.

Claims 1, 2 and 8 were rejected as unpatentable over NAKANO et al. 5,907,008 in view of KATSUYA et al. 6,081,310. Reconsideration and withdrawal of the rejection are respectfully requested.

Amended claims 1 and 2 include the step of using a second mask to pattern the silicon layer, the gate insulating film and the gate electrode layer. The result of this step is shown in Figure 7b, wherein silicon layer 30, gate insulating film 40 and gate electrode 52 are laminated in a stack. Note that, as a result of using one mask to pattern three layers, the edges of the three layers in the lamination are aligned.

In contrast, the references do not disclose or suggest using one mask to pattern all three of these layers. Since this feature is missing from both references, the step would not be obvious to one of skill in the art from their combination.

The Official Action asserts that NAKANO et al. disclose this step in Figure 6. However, note that in Figure 6 (discussed at column 28 in Example II-7) the corresponding layers (silicon layer 37, gate insulating film 40 and gate electrode 39a) do not have edges that are aligned and thus could not have been formed in a step that uses one mask. The related discussion of Example II-7 does not indicate that one mask is used to pattern all three layers. Accordingly, the amended claims avoid this rejection.

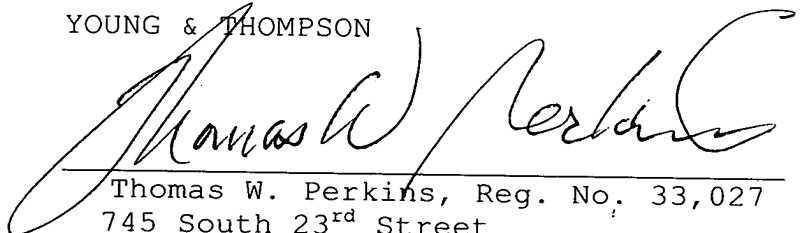
Claims 3-4 were rejected as unpatentable over NAKANO et al. in view of KATSUYA et al. and SUGITA et al. US 2003/0022071 A1. SUGITA et al. do not make up for the above-noted shortcoming and thus these claims also avoid the rejection.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Thomas W. Perkins", is written over a horizontal line.

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